

A novel predictive *in vitro* screen to assess Skin Sensitization

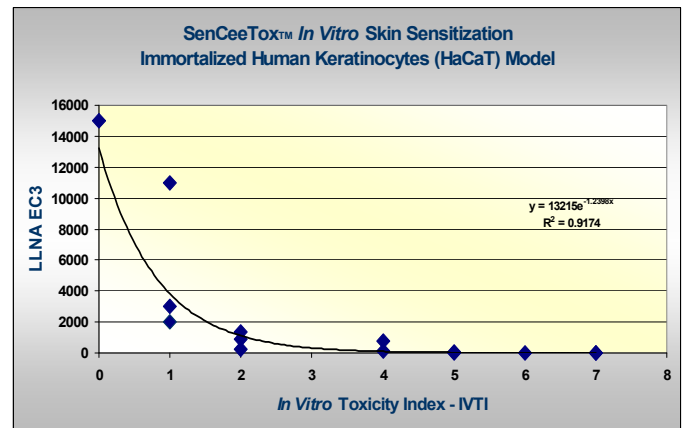
CeeTox, an innovator of predictive *in-vitro* models, introduces **SenCeeTox™**, a new method to identify and classify the skin sensitization potential of chemicals or finished products.



The proprietary **SenCeeTox™** method surpasses other *in vitro* methods that classify responses as merely positive or negative. Like the LLNA EC3 test, the **SenCeeTox™** approach can differentiate specific degrees of response, from non-sensitizer, very weak, weak, moderate, strong up to extreme.

The **SenCeeTox™** approach monitors the expression of up to 6 genes at multiple concentrations over time, and evaluates response in terms of magnitude, potency, timing, exposure, and viability to calculate the *in vitro* toxicity index (IVTI).

Compound Tested	CeeTox IVTI Sensitizer Class
Benzoic Acid	Non-Sensitizer
Salicylic acid	Very Weak
Vanillin	Very Weak
Glycerol	Very Weak
Phenyl Benzoate	Weak
Hydroxy Citronellal	Weak
Benzyl Cinnamate	Weak
Isoeugenol	Moderate
Diethylsulfate	Moderate
Propyl Gallate	Strong
2-Aminophenol	Strong
Phthalic Anhydride	Strong
Benzoquinone	Extreme
Dinitrobenzene	Extreme



Standard exponential regression analysis compares the IVTI to LLNA EC3 for a wide range of chemicals, allowing the EC3 value to be estimated and enabling a predictive value to be obtained (SenCeeTox™ patent pending).

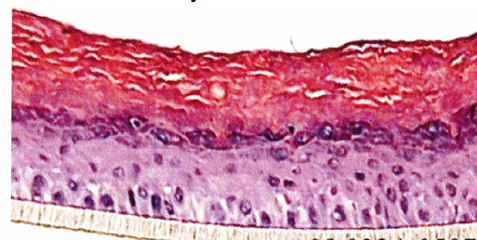
SenCeeTox™ data correlates to established LLNA EC3 values, however the unit cost to run the assay is significantly lower than either the LLNA or the GPMT. The **SenCeeTox™** screen can reduce the need for animal testing, and provides an efficient means to test large numbers of chemicals quickly and cost-effectively.

The **SenCeeTox™** system is versatile and can assess virtually any test sample. When solubility is high, a standard culture system of immortalized human keratinocytes (HaCaT cells) is used as the test system. However, when finished products or chemicals with low solubility are evaluated, a 3D reconstructed human epidermis (RHE) model cultured at an air/liquid interface is used as the test system.

SenCeeTox™ Unit Cost Comparison*

GPMT	LLNA EC3	SenCeeTox™
\$8 - 11k	\$8 - 11K	\$3 - 5K

* based on 20 test articles



Example of RHE model/H&E Histology